

Doc Code: AP.PRE.REQ

PTO/SB/33 (07-05)

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PRE-APPEAL BRIEF REQUEST FOR REVIEW

Docket Number (Optional)

R11.12-0701

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on December 26, 2006

Signature

Typed or printed name Chris Christenson

Application Number

09/667,297

Filed

September 22, 2000

First Named Inventor

Eric R. Lovegren

Art Unit

2857

Examiner

Jeffrey R. West

Applicant requests review of the final rejection in the above-identified application. No amendments are being filed with this request.

This request is being filed with a notice of appeal.

The review is requested for the reason(s) stated on the attached sheet(s).

Note: No more than five (5) pages may be provided.

I am the

applicant/inventor.

assignee of record of the entire interest.
See 37 CFR 3.71. Statement under 37 CFR 3.73(b) is enclosed.
(Form PTO/SB/96)

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Registration number if acting under 37 CFR 1.34 December 26, 2006

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December 26, 2006

Date

NOTE: Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required.
Submit multiple forms if more than one signature is required, see below*.

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This collection of information is required by 35 U.S.C. 132. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11, 1.14 and 41.6. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Mail Stop AF, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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REMARKS IN CONNECTION WITH PRE-APPEAL BRIEF REQUEST FOR REVIEW (09/667,297)

This Request for Review is filed in connection with a Pre-Appeal Brief Request for Review and Notice of Appeal in the present application. Applicant believes that there are omissions of one or more essential elements needed for a *prima facie* rejection.

The pending independent claim, claim 17, requires the "estimation" of the amplitudes of two reflected pulses. In the Advisory Action of October 11, 2006, as noted by the Examiner at Paragraph 4, the Reddy patent (US 5,134,377) uses a technique in which actual measurements are obtained. Specifically, Reddy "determines if the level of any reflection seen at the non-inverting input of the comparator exceeds a threshold." Thus, an actual measurement is required.

However, as noted in the Advisory Action at Paragraph 5, the claims of the instant application utilize an estimation which does not require an actual measurement of a reflected pulse. Therefore, the rejection should be withdrawn.

Next, the advisory action states that, in Reddy, based upon the comparison of the received signal to a threshold, "the threshold is then adjusted until any level of reflection does not exceed the threshold without performing a measurement or accurate determination of the reflected pulses." First, as stated in the previous sentence of the Advisory Action, Reddy does measure a reflected pulse. Second, whether or not Reddy's measurement is an "accurate determination" has no bearing on the pending claims.

That same sentence of the Advisory Action goes on to state, ". . . but rather uses random reflections that are estimates of the actual pulse." It is not clear what is meant by this phrase. However, what Reddy does say is that, "MCU 302 reduces the detection threshold by one step and repeats the process until a reflection is received which exceeds the threshold." (col. 9, l. 13-15.) This is not a description of an estimation. Instead, this describes a process requiring repeated measurements to adjust a threshold level.

The Advisory Action further asserts that the elements of the pending claims are met by the combination of Carsella (US 6,626,038) in view of Reddy (US 5,134,377). However, the Carsella reference relates to adjusting gain by controlling a potentiometer DP3. (Col. 6, l. 2-6.) DP3, "controls the amplitude of the return signal." (Col. 4, l. 44-45.) Although this is done in

Carsella based up input parameters, there is nothing to teach that it would be applicable to setting thresholds. Further, there is nothing in Carsella indicating that this could be used to estimate pulse amplitudes. Carsella only describes controlling gain.

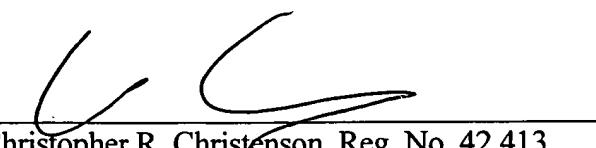
Finally, the ending paragraph the Office Action cites McEwan (presumably US 5,609,059) as showing the employment of thresholds for detecting reflections from first, second and fiducial interfaces. Particularly, column 8, line 66 through column 9, line 3 of McEwan are cited. However, McEwan simply shows the prior art technique of using fixed thresholds. There is nothing in McEwan, or the other cited references, to suggest the employment of multiple estimated thresholds.

In brief, the pending independent claim includes circuitry to receive information related to first and second dielectric constants of respective first and second materials. This is not shown in the cited references. Further, the circuitry estimates a fiducial pulse amplitude related to a reflected wave pulse from an interface between an antenna and the first material. The cited references do not describe estimating such a fiducial pulse amplitude. Further, the independent claim includes circuitry which estimates a first pulse amplitude related to a reflected pulse from a first material interface between a first material and a second material. This also is not shown by the cited references. Further still, the independent claim includes level calculation circuitry which establishes a level of material in a container based upon the first material interface using a signal, a first fiducial threshold value and the first threshold value.

It is believed that the present application is in condition for allowance. Reconsideration and favorable action are respectfully requested.

Respectfully submitted,

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